AMENDMENTS TO THE SPECIFICATION

Amend the paragraph beginning at page 8, line 5 to read as follows:

The second vertical axis 408 in FIG. 4 represents the passage of time, and the curve 410 indicates a sinusoidal cycle of the oscillating output of the ring oscillator, which corresponds to the output of the last delay cell and is indicative of the operating voltage range of the delay cells. The value V_CM shown at 412 on the horizontal axis 402 is the common mode voltage for the ring oscillator, as set by the value of Vref applied to the operational amplifier of the replica cell. V_CM corresponds to the operating point of the transistors of the replica cell and is at the center of the operating range of the delay cells. By contrast, in the previously proposed replica cell with one transistor gate held to the power supply and the other transistor gate grounded, the operating point of the replica cell is at Vmin (reference numeral 414), which is outside of the operating range of the delay cells. With the non-linearity of the active resistors, the previously proposed replica cell did not result ~~is~~ in a predictable or easily settable common mode output voltage for the ring oscillator. Consequently, there could be difficulties in coupling the ring oscillator to downstream CML, and the operation of the CML might prove to be unpredictable. The arrangement of the replica cell shown in FIG. 1 solves this problem, by tying the gate of each transistor of the differential pair to the transistor's drain, resulting in balanced operation of the replica cell. As a result, the operating point of the replica cell is set by Vref, and governs the common mode output voltage of the ring oscillator, so that there is no need for level shifting in the downstream CML.

Amend the paragraph beginning at page 8, line 28 to read as follows:

The level of the bias current Ibias provided by the current source 142 in the delay cell may (subject to fluctuations to adjust the oscillator frequency) be set so that the fall time of the output signal matches the rise time. The rise time is a function of the RC characteristic at the output, whereas the fall time depends on ~~a~~ an integral of Ibias/C.